A New Anti-Aging Therapy: Intravenous Injection of Nephron Organelles Responsible for Junk Protein Filtering

Introduction

Now that it is understood that a great deal of the aging process is instigated by the accumulation of junk proteins in the blood, the potential to greatly extend the human lifespan seems close within reach. One approach that is capable of removing the blood proteins associated with aging is plasmapheresis.

Abstract

Plasmapheresis machines are prohibitively expensive and saline-blood exchange carries with it some risk, although regular replacement of the blood (given the removal of junk proteins) has been proven to extend lifespan by 30%. This is not to mention that powerful financial interests are willing to do just about anything to avoid losing the kind of money they'd be likely to lose if the human lifespan were increased to, on the average, 100 years of age and in some cases, individuals may even be made to live to be nearly 150 years of age. A solution is needed that allows for the culprit proteins to be safely and affordably eliminated and the research to achieve this must be done outside of the reach of corrupt powers that would sooner seek to cull the aged and sickly to protect their profits than allow the human lifespan to be extended.

To develop such an advanced therapy, we must first identify the causal source of this protein accumulation.

I propose that this protein accumulation begins with a subtle deficiency in kidney function. A section of a nephron organelle dedicated to filtering these proteins ceases to perform its function around the age of between 20 and 30 in virtually all humans. The reason for this dysfunction, I believe, is due to vesicles attached to these nephrons becoming filled to capacity with filtered proteins. Conventional wisdom holds that these proteins are dissolved as opposed to being sequestered and at this point, researchers aren't even looking at the kidneys when it comes to aging research.

This hypothesis, if meted out, would not be without parallel. Conditions such as phenylketonuria have been known for decades and involves a congenital impairment of the kidneys to eliminate a specific class of proteins that, if not filtered, causes permanent neurological deficits. Conditions such as lactose intolerance often don't emerge until a person's mid-20s because the enzymatic pumps responsible for the production of the lactase enzyme, even when present at birth, can become impaired after years of activity. This would be an example of a bodily system that is effected by this aging-related protein accumulation fairly early in life. This goes to show how deficiencies in the kidneys ultimately cause broad systemic issues. All of these issues could be considered part of the overall aging process.

A logical focus, therefore, of anti-aging research should be on the kidneys. The conundrum, it would seem, is finding a way to eliminate the theorized vesicles

of sequestered junk protein without releasing them into the body, damaging the vesicles, or releasing toxins that harm the kidneys generally.

The ability to grow new kidneys in vitro and transplant these lab-grown organs is promising and while certainly appropriate for those with acute kidney injury/disease, the risks associated with major surgery would not be justified for the mere sake of halting the aging process for 10-15 years post-transplant. It is furthermore important to bear in mind that it is not the entire kidney that is deficient in most cases, it is simply that there is no space remaining for filtered proteins to be stored. Therefore, a different approach is called for.

I therefore propose an anti-aging therapy involving the intravenous injection of genetically compatible cloned nephron organelles directly into the blood stream to clean the blood over a period of days from within the blood stream itself. Only the protein sequestration mechanism would be involved and not whole nephrons. These organelles would be surrounded by oxygenated blood but would lack the proper pumping mechanism to keep oxygenated blood flowing to keep the organelles alive. In a period of days, the organelles would perish.

When necrosis sets in, the immune system would attack and carry away the partial nephron and the collected accumulated junk protein along with it, not unlike a lawnmower and an attached collection bag for trimmings. Given that in this case, the nephron fragments, vesicles, and collected proteins would all be within reach of the immune system, the process could be repeated every five years and successfully attenuate serum junk protein levels without the need for plasmapheresis.

Conclusion

There would be substantial pushback against the implementation of such a therapy in certain Western nations that would stand to lose money in the event that their citizens' life expectancies were suddenly and dramatically increased. Parties from the government itself to health insurance companies would pull out all the stops to keep such a therapy from becoming available.